

SOA-1310-B



DEVICE

Semiconductor Optical Amplifier, 1250-1350nm, Benchtop

OVERVIEW

The Optilab SOA-1310-B is a semiconductor optical amplifier with high fiber-to-fiber gain, designed to be used in general applications to increase optical launch power to compensate for loss of other optical devices. The SOA-1310-R can be ordered with Single Mode (SM) or Polarization Maintaining (PM) fiber input/output, with this particular SOA module having broadband amplification from 1250nm to 1350nm wavelengths, in a benchtop. It requires only AC power cord with low power consumption, with a full software control and monitoring via RS232 serial communication protocol.

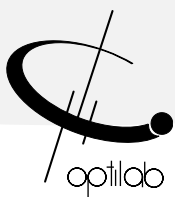
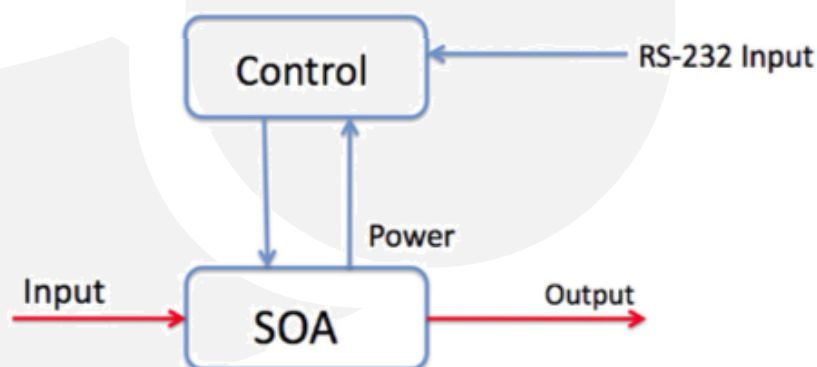
FEATURES

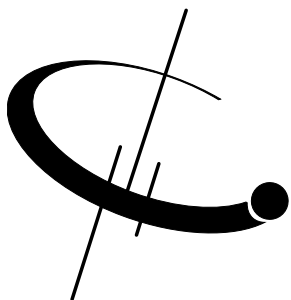
- Wideband 1250nm – 1350nm amplification
- High fiber-to-fiber gain 19 dB
- Up to 16 dBm output
- Benchtop
- PM Panda fiber input/output (optional)
- Front touch screen control

USE IN

- Booster and in-line amplification
- Optical network
- General purpose test and measurement
- Fiber sensing

FUNCTION DIAGRAM





SOA-1310-B

SPECIFICATIONS

GENERAL

| | |
|---|----------------------------------|
| Operating Wavelength | 1250nm to 1350nm |
| Saturated Output Power @ -3 dB input | +16 dBm typ. |
| Input Power | -25 ~ +5 dBm |
| Fiber-to-fiber Gain | Up to 20 dB @ small signal input |
| Noise Figure | 7 dB typ. |
| Gain Ripple | 0.3 dB typ. |
| Input Optical Return Loss | -55 dB typ. |
| Input/Output Isolation | 30 dB min. (w/ isolator option) |
| Polarization Dependent Gain (PDG) | 0.5 dB max |
| Polarization Extinction Ratio (PM type) | 20 dB typ. |
| Power Stability | ± 0.1 dB over 8 hours |
| Output Current Control | 10% to 100% operating current |

MECHANICAL

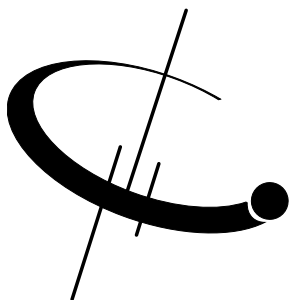
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|---------------------------|---|
| Operating Temperature | -10°C to +60°C |
| Storage Temperature | -40°C to +70°C |
| Power Supply Requirements | 80 – 240 V, 43 – 63 Hz AC |
| Power Consumption | 60 W max. |
| Output Level Control | Pump Lasers Current Adjustment |
| Monitoring | Pump Laser Temperature |
| Computer Interface | LabVIEW via USB |
| Display | Input/Output Power Level, TEC Temperature |
| Alarms | Temperature and Input Power |
| Optical Connectors | FC/APC, SC/APC, Other Types Optional |
| Housing Dimensions | 250mm (W) x 300mm (L) x 100mm (H) |

OPTIONS

SOA-1310-XX-B

XX SM: Single Mode, PM: Polarization Maintaining





SOA-1310-B

RELATED MODULE

- **SOA-1310-M**



The Optilab SOA-1310-M is a semiconductor optical amplifier with high fiber-to-fiber gain for OEM integration in MSA housing.

